

REMARKS

Claims 1-4, 6-15 and 18-47 are pending, with claims 1-4, 7-10, 12-14 and 24 being independent. Claims 1-4, 7-10 and 12-14 have been amended, and claims 40-47 have been canceled. In particular, each of claims 1-4, 7-10 and 12-14 has been amended to recite that the polarity pattern is maintained during the frame period and changed to another polarity pattern after the frame period either irregularly (claims 1-3, 7-9 and 14) or randomly (claims 4, 10, 12 and 13). Support for these amendments may be found in the application at, for example, page 24, line 18 to page 25, line 6. No new matter has been introduced.

Initially, applicant notes that the current action is believed to be a non-final action, as confirmed by the Examiner on April 1, 2005.

Claims 1-3, 6-9, 11, 14, 18, 19, 21, 22 and 27 have been rejected as being anticipated by Hirakata (U.S. Patent No. 6,496,172).

With respect to claim 1 and its dependent claims, applicant requests reconsideration and withdrawal of this rejection because Hirakata does not describe or suggest maintaining a polarity pattern during a frame period, and irregularly changing to another polarity pattern after the frame period, as recited in claim 1. Instead, Hirakata describes changing the polarity pattern multiple times during a frame period. Col. 9, lines 29-32 ("[T]he inversion driving of the present invention is characterized in that not less than four polarity patterns are sequentially displayed every frame (every field in the case of interlaced scanning)."). In addition, as has been noted in previous responses, Hirakata does not describe or suggest irregularly changing the polarity pattern and, instead, describes sequencing through a predetermined set of patterns. Accordingly, for at least these reasons, the rejection should be withdrawn.

Like claim 1, each of independent claims 2, 3, 7-9 and 14 similarly recites maintaining a polarity pattern during a frame period, and irregularly changing to another polarity pattern after the frame period. Accordingly, the rejection of these claims, and their dependent claims, should be withdrawn for at least the reasons discussed above with respect to claim 1.

Claims 4, 10, 12, 13, 15, 20, 23-26 and 28-37 have been rejected as being anticipated by Cole (U.S. Patent No. 6,469,684).

With respect to claim 4 and its dependent claims, applicant requests reconsideration and withdrawal of this rejection because Cole does not describe or suggest changing together the polarities of the display signals input to the pixel electrodes through the pixel TFTs connected to one of the signal lines, as recited in claim 4. Instead, as illustrated by Fig. 3 of Cole, Cole describes changing the polarity of individual sub-pixels, rather than all of the sub-pixels connected to a particular one of the signal lines. Indeed, Cole appears to teach away from the recited approach when stating, at col. 6, lines 31-34 (emphasis added), that "when choosing a Cole sequence generator pattern, it is preferable to prevent long strings of positive or negative biases to reduce the likelihood of display artifacts from forming." Accordingly, for at least these reasons, the rejection of claim 4 and its dependent claims should be withdrawn.

Like claim 4, each of independent claims 10, 12 and 13 recites changing together the polarities of the display signals input to the pixel electrodes through the pixel TFTs connected to one of the signal lines. Accordingly, the rejection of these claims, and their dependent claims, should be withdrawn for at least the reasons discussed above with respect to claim 4.

Similarly, claim 24 recites that the polarities of display signals input to pixel electrodes in a vertical line change together, and applicant requests reconsideration and withdrawal of the rejection of claim 24, and its dependent claims, because Cole does not describe or suggest an arrangement in which the polarities of the display signals input to pixel electrodes in a vertical line change together. Instead, Cole's system controls the polarities of the signals applied to each pixel. Thus, while Fig. 3, frame 2 of Cole happens to show a situation in which the polarities of the signals applied to the pixels in the second vertical line have the same value, Cole nowhere describes or suggests changing the polarities of those signals together. For example, frame 3 of Cole's Fig. 2 shows only the polarity of the signal applied to one of the pixels in the second vertical line as having changed, and does not show the polarity of the signals applied to the pixels in the second vertical line to be changing together.

Applicant submits that all claims are in condition for allowance.


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Enclosed is a \$300 check for the Petition for Extension of Time fee (\$120) and for the late submission fee of §1.17(p) (\$180). Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 8/1/05

  
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